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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/473,963	12/29/1999	KOICHI SANO	P341-9013	1678

7590

07/26/2002

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EXAMINER

LONSBERRY, HUNTER B

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 07/26/2002

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/473,963

Applicant(s)

SANO ET AL.

Examiner

Hunter B. Lonsberry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 29 December 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 20 July 2000 is: a) ☒ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

1) "...However, it is respectfully submitted that Kikuchi is not a proper reference under 35 U.S.C. 102 (b)..... Kikuchi was patented on May 8, 2001, which post-dates the Applicant priority date of December 20, 1998." (Page 3, paragraph 2)

The examiner acknowledges applicants argument and the applicant is correct in that U.S Patent 6,227,973-B1 is not a valid reference under 35 U.S.C. 102 (b). The examiner directs applicant's attention to Kikuchi's U.S. filing date of April 23, 1997, therefore Kikuchi is valid prior art under 35 U.S.C. 102(e).

2) "Kikuchi, however, does not teach or suggest an information processor, as recited in claim 1. In particular, Kikuchi does not teach or suggest an information processor that can handle hardware resources and which is configured by a driver program and driver data." (Page 4, paragraph 1)

The examiner agrees that Kikuchi is silent regarding the use of drivers and driver data (See Non-Final Rejection page 3). The examiner reads the term "driver" to be software that is used to control a device, the software acting like a translator between the device and any program/hardware that accesses the device. Drivers are essential for the operation of a computing device, such as the mouse or trackball disclosed as interface 4 by Kikuchi (column 6, lines 24-29), since they handle the input and output between devices in addition to the control mechanisms for the device. The examiner

reiterates that Kikuchi must use an "information processor hardware driver" as the information processor (which the examiner equates to the CPU 1 of Kikuichi, see Kikuichi, Figure 1) requires the use of some stored executable code to read and interpret the input from controller 22 or interface 4, which Kikuchi discloses may be a mouse or track ball (see above), otherwise the user would be unable to interact with the disclosed video game system of Kikuchi because the information processor would be unable to interpret any input.

3) "...Kikuchi discloses that the CPU operates a recording medium to read a game program from the recording medium. Also, in the present invention all the modules such as the operating system and application software contents are contained within a single chip semiconductor memory. In contrast, the operating system of Kikuchi is contained in the ROM and the application programs are read out by the CPU from the recording medium to the memory." (Page 4, paragraph 1).

Regarding applicants argument 3, claim 1 simply requires a semiconductor memory storing software for driving the information processor, including an operating system, man-machine interface drivers, application software and application software engine. Kikuchi discloses that when the video game system is used for business use then all of the components disclosed in Figure 1, which includes the semiconductor memory containing the application software as well as ROM 6 on which the operating system is stored (column 5, lines 54-62, column 8, lines 15-25) may be encased in a single housing. It is well known to one in the memory art to store both the operating

system and application software in the same memory in order to reduce the complexity and costs associated with a design.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,227,973-B1 to Kikuchi.

Regarding claim 1, Kikuchi discloses in Figure 1, a video game system which outputs video and audio signals to a home TV set with the system comprised of: a man-machine interface (controller 22, interface 4, column 6, lines 24-26), a semi conductor memory (ROM 6), and an information processor (CPU 1). The man-machine interface converts input from buttons pressed on controller 22 or input on interface 4 into electrical signals, ROM 6 stores the operating system used to direct CPU 1 and administer resources and interrupt control (column 6, lines 26-29), a man-machine interface driver 1a (column 9, lines 23- 24) to efficiently deliver electrical signals from the man-machine interface to the application software being run by the CPU 1, application software engine read from recording medium 30 (column 8, lines 50-56) for

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instructing the CPU to perform a number of tasks and subroutines, the application software program includes data which is handled by the CPU and application software (column 8, lines 54-56, column 9, lines 2-7), and the CPU performs operations based upon audio and video data from the application software as well as input from the controller (column 9, lines 2-18). Kikuchi inherently uses an "information processor hardware driver" as the information processor (which the examiner equates to the CPU 1 of Kikuichi, see Kikuichi, Figure 1) requires the use of some stored executable code to read and interpret the input from controller 22 or interface 4, which Kikuchi discloses may be a mouse or track ball (see above), otherwise the user would be unable to interact with the disclosed video game system of Kikuchi because the information processor would be unable to interpret any input. Kikuchi does not disclose the use of a single semiconductor memory coupled to the CPU but instead stores the operating system in a ROM 6 and reads application software from a main memory 5 (column 9, lines 2-5). Additionally, Kikuchi discloses that when the video game system is used for business use then all of the components disclosed in Figure 1, which includes the semiconductor memory containing the application software as well as ROM 6 on which the operating system is stored (column 5, lines 54-62, column 8, lines 15-25) may be encased in a single housing. The examiner takes official notice that it is well known in the art to store application software, drivers, and operating system on the same memory device (for example: a personal computer hard drive). Therefore it would have been obvious to one skilled in the art, at the time of invention to modify Kikuchi to store the application software, drivers, and operating system on a semiconductor memory to

reduce the complexity of the device and reduce loading times as all the software would be stored in the same memory.

Regarding claim 2, Kikuchi discloses in Figure 1 a video game system with a CPU 1, a graphics processor 10, and audio processor 13: CPU 1, audio processor 13 and graphic processor 10 all share Main Memory 5 (column 8, lines 64-column 9, line 5), the CPU 1 controls graphics processor 10 and audio processor 13 based on electrical signals generated by a player on controller 22 (column 9, lines 5-8) and application software (column 8, lines 50-54), the graphics processor has the ability to generate image information (column 8, lines 54-63), and the sound processor has the ability to generate sound information (column 7, line 66-column 9, line 14).

Regarding claim 3, Kikuchi discloses in Figure 1, a video game system which outputs video and audio signals to a home TV set comprised of: a man-machine interface (controller 22, interface 4, column 6, lines 24-26), a semi conductor memory (ROM 6), and an information processor (CPU 1). The man-machine interface converts input from buttons pressed on controller 22 or input on interface 4 into electrical signals, ROM 6 stores the operating system used to direct CPU 1 and administer resources and interrupt control (column 6, lines 26-29), a man-machine interface driver 1a(column 9, lines 23- 24) to efficiently deliver electrical signals from the man-machine interface to the application software being run by the CPU 1, application software engine read from recording medium 30 (column 8, lines 50-56) for instructing the CPU to perform a number of tasks and subroutines including scripts (Figures 6-8, column 11, lines 53-62), the application software program includes data which is handled by the CPU and

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application software (column 8, lines 54-56, column 9, lines 2-7), and the CPU performs operations based upon audio and video data from the application software as well as input from the controller (column 9, lines 2-18), these inputs are used to execute tasks as defined in scripts stored in ROM 6 (Figures 6-8, column 11, lines 53-62. The application software utilizes and executes the script language code to configure the software application code and runs on the CPU (column 11, line 63-column 12, line 10). Kikuchi's system inherently contains an "information processor hardware driver" for controlling and allocating hardware resources within the system as drivers are required to operate the hardware within the device since they act like a translator between the device and programs that use the device and thus are essential for device operation.

Regarding claim 4, Kikuchi discloses a television game device, in Figure 1, which contains a CPU 1, graphics processor 10, and audio processor 13, all of which share main memory 5, the CPU 1 controlling graphics processor 10 and audio processor 13 based upon electrical signal received from controller 22 and program code from memories 5, 6 (column 8, line 47-column 9 line 18). The graphics processor has the ability to generate image information (column 8, lines 54-63), and the sound processor has the ability to generate sound information (column 7, line 66-column 9, line 14).

Regarding claim 7, Kikuchi discloses that the video game system composed of a man-machine interface 22, semiconductor memory 5, 6, and CPU 1 are incorporated in a single apparatus (column 5, lines 34-62).

Regarding claim 8, Kikuchi discloses that the video game system composed of a man-machine interface 22, semiconductor memory 5, 6, and CPU 1 are incorporated in a single apparatus (column 5, lines 34-62).

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,227,973-B1 to Kikuchi in view of U.S. Patent 6,227,974-B1 to Eilat.

Regarding claim 5, Kikuchi discloses a video game system in which CPU 1 performs operations based upon audio and video data from the application software as well as input from the controller (column 9, lines 2-18), these inputs are used to execute tasks as defined in scripts stored in ROM 6 (Figures 6-8, column 11, lines 53-62. Kikuchi does not disclose the use of a general communications line capable of transmitting and receiving data and or a program through a general communications line or having the CPU perform an operation based upon data and or a program obtained through the communications line. Eilat discloses in Figure 2 a video game system that includes a telephone modem 104 for receiving data in order to play the game (column 15, line 66-column 16, line 3). Therefore it would have been obvious to one skilled in the art at the time of invention to modify Kikuchi to include the modem and communications line of Eilat to provide additional data to the CPU to allow a user to play a game with other users, download additional gaming programs or levels to be used on the video game system, or to provide an internet terminal capability to the user without the need for additional hardware.

Regarding claim 6, Kikuchi discloses a video game system in which CPU 1 performs operations based upon audio and video data from the application software as well as input from the controller (column 9, lines 2-18), these inputs are used to execute tasks as defined in scripts stored in ROM 6 (Figures 6-8, column 11, lines 53-62. Kikuchi does not disclose the use of a general communications line capable of transmitting and receiving data and or a program through a general communications line or having the CPU perform an operation based upon data and or a program obtained through the communications line. Eilat discloses in Figure 2 a video game system that includes a telephone modem 104 for receiving data in order to play the game (column 15, line 66-column 16, line 3). Therefore it would have been obvious to one skilled in the art at the time of invention to modify Kikuchi to include the modem and communications line of Eilat to provide additional data to the CPU to allow a user to play a game with other users, download additional gaming programs or levels to be used on the video game system, or to provide an internet terminal capability to the user without the need for additional hardware.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 5,634,848 to Tsuda: Video Game System.


U.S. Patent 5,532,923 to Sone: Karaoke Network System Serving Spare Events During Idling Time.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hunter B. Lonsberry whose telephone number is 703-305-3234. The examiner can normally be reached on Monday-Thursday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-5359 for regular communications and 703-372-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.


ANDREW FAILE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

HBL
July 17, 2002